

postorbital 16.5, maxillary 12.5, snout 6.5, eye 8.5, antedorsal 19.

The presence of distinct rather well developed bony tubercles on the upper aspect of the snout sets off *piratica* from all its congeners now known. The other species of *Emblemaria* have bony ridges in the same location. In

piratica these ridges have developed distinct tubercles. As noted under *piratula*, here also this character evidently represents one of the first stages in the development of the armature of the head, which reaches a high degree in *Acanthemblemaria*.

ZOOLOGY.—*Further remarks on some Mexican Urosaurus.*¹ M. B. MITTLEMAN.
(Communicated by HERBERT FRIEDMANN.)

A short time ago I had occasion to discuss *Uta nelsoni* Schmidt in a review of the Mexican so-called *Uta ornata* complex. I indicated at the time (This JOURNAL 31: 72-73. 1941) that on the basis of the type alone this nominal form seemed distinct enough from *bicarinata* and *anonymorpha* but was probably best disposed of as a subspecies of *bicarinata*. More recently (Bull. Mus. Comp. Zool. 91: 168. 1942), because no additional material had come to hand, I reiterated my former statement but included *nelsoni* as well as *bicarinatus* and *anonymorphus* in the redefined genus *Urosaurus*. As matters stood, *U. b. bicarinatus* was thought to range not farther east than Acapulco, Guerrero; *U. b. anonymorphus* was known to occur from Tierra Colorada, Guerrero to Tonolá, Chiapas; the unique type of *U. b. nelsoni* was known from Cuicatlán, Oaxaca.

Through the kindness of Dr. Edward H. Taylor I have had opportunity to examine, and report herewith, four *Urosaurus* from the type locality of *nelsoni* (EHT-HMS nos. 14054-57); in addition, Dr. Taylor has kindly lent me three *Urosaurus* from Totolapan, Oaxaca, which is about midway between Cuicatlán and the previously known range of *anonymorphus*. The seven specimens are exceedingly interesting, clarifying as they do the status of *nelsoni* and offering further information on the relationships and distribution of *bicarinatus* and *anonymorphus*. The apparent differences, which I previously reported as existing between *nelsoni* and the more southerly races *bicarinatus* and *anonymorphus*, now appear

to rest solely on the basis of individual variation in the type specimen of *nelsoni* (U.S.N.M. no. 46836). With good series of *anonymorphus* and *bicarinatus* before me, as well as Dr. Taylor's topotypes of *nelsoni*, I fail to note anything of a distinctive nature in the *nelsoni* that would serve to separate them from *bicarinatus*. The characters I heretofore considered diagnostic of *nelsoni*, as the immucronate ventrals, poor development of dorsolateral and lateral tubercles, smaller enlarged dorsals, and different proportions of the head, lack confirmation in these newly available individuals. In all the characters named, as well as others, I can not distinguish between *nelsoni* and *bicarinatus*. The Cuicatlán material (*nelsoni*) is fully as tuberculate, ventrals as mucronate, enlarged dorsals as big, and the head proportions are entirely within the range of variation exhibited by a good series of specimens from Cuernavaca, Morelos (*bicarinatus*). I must therefore regard *nelsoni* as a synonym of *bicarinatus*. The illusory distinction of the type specimen reflects a common type of individual or local variation seen in all *Urosauri*, especially in remote or end populations.

The specimens from Totolapan, Oaxaca (EHT-HMS nos. 14051-53), are interesting variants of the *anonymorphus* type; superficially they are somewhat like intergrades between this latter race and *bicarinatus*, although immediately recognizable as being much closer to *anonymorphus*. I think that here we are dealing with another case of the recrudescence of parental characters, in relatively remote populations of a derivative form, which occurs elsewhere in the *Urosauri* (cf. *U. clarionensis* and *U.*

¹ Received October 10, 1942.

auriculatus). Actual intergradation between *bicarinatus* and *anonymorphus* takes place, so far as known, only in eastern Guerrero, in the vicinity of Acapulco. The race *bicarinatus* largely follows the Río Balsas drainage in both the Upper and Lower Balsan biotic provinces (see Smith, Field Mus. Nat. Hist. Zool. Ser. 26: 15 *et seq.* 1939), while *anonymorphus* is largely restricted to the Tehuantepecan province, but extends westward to eastern Guerrero (Lower Balsan) and eastward to Chiapas (Tapachulan province). Thus, as now known, *bicarinatus* extends northward from Guerrero to Puebla, thence southeastward through northern Oaxaca to Cuicatlán. *U. b. anonymorphus* ranges from Tierra Colorada, Guerrero, to Tonolá, Chiapas; the most northerly record for the race is from Totolapan, Oaxaca. In Oaxaca, the ranges of *bicarinatus* and *anonymorphus* do not

meet, for the Río Balsas basin in the north and the Tehuantepec drainage of the south are separated by two great barriers: the high plains surrounding Oaxaca City and the range of mountains north of this city. The subspecies *anonymorphus* is now known from the following Oaxaca localities: Tehuantepec (type locality); Tuchtan; San Geronimo Ixtepec; Tres Cruces; Mount Guengola; Portillo los Nanches; San Bartolo; El Limón; Cajon de Piedra; Cerro Arenal; Mixtequilla; Salina Cruz; Huamehula; Totolapan. It is known also from Tierra Colorada, Guerrero, and Tonolá, Chiapas.

I am grateful to Dr. Edward H. Taylor for the opportunity to examine and publish information on lizards in his collection. Dr. Hobart M. Smith has kindly offered additional information on the Mexican biotic provinces involved.

PROCEEDINGS OF THE ACADEMY

NEW MEMBERS

The following persons were recently elected nonresident members of the Academy:

Brother LEON (JOSEPH SYLVESTRE SAUGET Y BARBIER), professor of botany, Colegio de la Salle, Vedado, Havana, Cuba, in recognition of his contributions to botany, particularly his researches on the palms of Cuba.

JOSÉ ANTONIO BERNABÉ NOLLA, director of Insular Government Agricultural Experiment Station, Rio Piedras, Puerto Rico, in recognition of his outstanding work in agricultural science, especially in plant physiology with tobacco and in plant nutrition from the standpoint of Liebig's law of the minimum.

313TH MEETING OF THE ACADEMY

The 313th meeting of the Academy was held jointly with the Washington Branch of the Society of American Bacteriologists, in the assembly hall of the Cosmos Club at 8:15 P.M. on October 15, 1942, with President CURTIS presiding. A. B. CRAWFORD introduced the speaker.

STUART MUDD, professor of bacteriology in the School of Medicine at the University of Pennsylvania, Philadelphia, Pa., delivered an address entitled *Structural differentiation within bacterial cell as shown by the electron microscope*. Professor MUDD discussed the differentiation of bacterial capsule, protoplasmic membrane, and nuclear material, and pointed out certain implications regarding the rationale of the uses of

vaccines and serums. The lecture was illustrated with many electron micrographs.

There were about 175 persons present. A social hour followed the meeting.

377TH MEETING OF THE BOARD OF MANAGERS

The 377th meeting of the Board of Managers was held in the library of the Cosmos Club on October 19, 1942. The meeting was called to order at 8:00 P.M. by President CURTIS, with 21 persons present, as follows: H. L. CURTIS, F. D. ROSSINI, N. R. SMITH, W. W. DIEHL, J. E. GRAF, F. G. BRICKWEDDE, H. B. COLLINS, JR., W. G. BROMBACHER, E. P. WALKER, A. H. CLARK, ALEXANDER WETMORE, J. B. REESIDE, JR., J. E. MCMURTREY, JR., W. A. DAYTON, F. B. SILSBEE, E. W. PRICE, L. W. PARR, C. L. GARNER, H. G. DORSEY, HERMAN STABLER, and, by invitation, J. R. SWALLEN.

The minutes of the 376th meeting were read and approved.

President announced the following appointments: A. J. LOTKA, to be the Academy's delegate at the inauguration on September 30, 1942, of Henry Noble Wright as president of the City College of the City of New York; ATHERTON SEIDELL, to be chairman of the Committee on Meetings, in place of J. H. KEMPTON, who resigned because of his appointment to an assignment in South America.

The Board authorized an additional allotment of \$15 for the Committee on Meetings for